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31049 7590 11/12/2008 Elan Drug Delivery, Inc. c/o Foley & Lardner 3000 K Street, N.W. Suite 500 Washington, DC 20007-5109				
EXAMINER				
KWON, BRIAN YONG S				
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1614				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/667,470

**Applicant(s)**

JAIN ET AL.

**Examiner**

Brian-Yong S. Kwon

**Art Unit**

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27-50, 54-106 and 110-111 is/are pending in the application.
- 4a) Of the above claim(s) 54-86, 110 and 111 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-50 and 87-106 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 08/11/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of Application***

1. Acknowledgement is made of applicants' filing of the instant application as a Request for Continued Examination (RCE) under 37 CFR 1.1114.
2. Acknowledgement is made of applicant's filing of amendment/remarks on 08/11/08. By the amendment, claims 27 and 87 have been amended and claims 51 and 107 have been cancelled. Claims 27-50 and 87-106 are currently pending for prosecution on the merits of the case.
3. The applicant's amendment changing the scope of the invention by excluding a non-steroidal anti-inflammatory raises new issue(s) that necessitate(s) a new ground of rejection in this Office Action.
4. It is noted that applicant has received an action on the merits for the Group II invention along with (i) COX-2 inhibitor type non-steroidal anti-inflammatory, (ii) water-soluble or water dispersible excipient and (iii) surface stabilizer such as polyvinyl pyrrolidone and/or sodium lauryl sulfate as the elected species. However, applicant's cancellation of "a non-steroidal anti-inflammatory drug" necessitates new issues that require further search and/or consideration. Accordingly, the examiner will extend the search to other non-elected species, e.g., antibiotics (examiner's free of choice), and examine for prosecution on the merits of the case. Claims 27-50 and 87-106 read on the elected invention.
5. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of actions being applied to the instant application.

6. With respect to the rejection of the claims 27-50 and 87-106 under the judicially created doctrine of double patenting, the examiner maintains the rejection of record since no Terminal Disclaimer is filed and approved in our PTO record.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 27-50 and 87-106 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims in this application introduce new negative limitations, namely “wherein the active agent is not a non-steroidal anti-inflammatory drug”. The examiner determines that when all evidences in the original disclosure are considered and carefully reviewed, the newly amended claims fail to find support in the original specification.

There is no express statement about the negative limitation that can be found in the specification. Thus, the exclusion of said elements implies the inclusion of all other elements not expressly excluded, clearly illustrating that such negative limitations do, in fact, introduce new matter. The negative limitation recited in the present claims, which did not appear in the

specification filed, introduces new concepts and violate the description requirement of the first paragraph of 35 USC 112.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 27-34, 37-47, 87-93 and 96-105 rejected under 35 U.S.C. 102(b) as being anticipated by Eickhoff et al. (USP 5518738).

Eickhoff teaches a rapidly-acting (“more rapid onset of action”) solid oral dose form pharmaceutical composition comprising “poorly soluble” active drugs in nanoparticulate form, for example NSAIDs in crystalline phase and nanoparticulate, dispersed in mixtures of hygroscopic sugar (i.e., mannitol), polyvinylpyrrolidone and sodium lauryl sulfate, wherein the polyvinylpyrrolidone surface modifier mixed with the hygroscopic sugar and sodium lauryl sulfate is adsorbed on the surface of the active drug (abstract; column 2, lines 41-50; column line 59 through column 3, line 32; column 3, lines 36-48; column 5, lines 45-52; claims 1-10 and 15; claims 1-10, particularly claim 4), wherein the average particle size of the active is less than about 1000 nm, preferably less than 300nm (column 3, lines 49-59); the concentration of the active is in range from about 0.1 to 60% (column 4, lines 16-21; the concentration of polyvinylpyrrolidone is in range from about 0.1 to about 90% (column 4, lines 21-24 and column 5, lines 42-44); the concentration of the hydrogroscopic sugar (i.e., mannitol) in range of from 10 to 75% (column 5, lines 53-54); and the concentration of the sodium lauryl sulfate is in range of

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from 0.1 to 10% (column 5, lines 55-57); and the dispersion is sprayed dried to a fine powder in a fluidized bed coater (Examples). Eickhoff also discloses a method of treating a mammal comprising administering said composition (see claims 11-14).

Although Eickhoff discloses the NSAIDs as the preferred class of drugs in said oral dose form, for example an oral solid dosage form comprising nanoparticulate naproxen (approximately 200 nm) having mixtures of polyvinylpyrrolidone, mannitol and sodium lauryl sulfate dispersant adsorbed on the surface (Examples 1 and 2), Eickhoff expressly teaches that other active drugs such as antibiotics can be utilized in replace of NSAIDs (column 2, lines 49-51).

With respect to “the solid dose matrix surrounding the nanoparticulate active agent and at least one surface stabilizer disintegrates or dissolves upon contact with saliva is less than about 3 minutes” in claims 27 and 87, “the solid dose matrix disintegrates or dissolves upon contact with saliva in a time period selected from the group consisting of less than about 2 minutes, less than about 90 seconds...” in claim 28, such property or characteristic deems to be inherent to the referenced “more rapid onset of action” composition since the essential components of Eickhoff are identical to the instant composition (that is an oral solid dose rapidly disintegrating nanoprticulate having an average particle size of less than 1000nm and water-dispersible excipient and/or a surface stabilizer (i.e., polyvinylpyrrolidone, mannitol and sodium lauryl sulfate)). Thus, Eickhoff anticipates the instant invention.

With respect to the specific average particle sizes (recited in claims 29-34 and 88-93), the referenced average particle size of the active, e.g., less than about 1000 nm, preferably less than

300nm, more preferably 200nm, “metes and bounds” the instantly required particle size and thus anticipates the claimed invention.

With respect to the specific amounts of active agent or excipient in said composition (recited in claims 37-42 and 96-101), the referenced concentration of the active agent which is in range from about 0.1 to 60% and the referenced concentration of polyvinylpyrrolidone which is in range from about 0.1 to about 90% “metes and bounds” the instantly required amounts of active and/or excipients and thus anticipates the claimed invention.

With respect to “said excipient is selected from the group consisting of a direct compression material and a non-direct compression material” in claims 45 and 104, such property or characteristic deems to be inherent to the referenced excipients such as mannitol. Thus, Eickhoff anticipates the instant invention.

It is noted that In re Best (195 USPQ 430) and In re Fitzgerald (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter which there is reason to believe inherently includes functions that are newly cited or is identical to a product instantly claimed. In such a situation the burden is shifted to the applicants to “prove that subject matter shown to be in the prior art does not possess characteristic relied on” (205 USPQ 594, second column, first full paragraph).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 27-50 and 87-106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eickhoff et al. (USP 5518738) in view of applicant's admitted prior art of record (pages 1, line 31 through page 4, line 22) or Allen et al. (US 6177104).

The teaching of Eickhoff has been discussed in above 35 USC 102(b) rejection.

Applicant's admitted prior art of record and Allen are provided as supplemental references to demonstrate the routine knowledge in preparing micro- or nano-particulate compositions in a rapidly disintegrating or dissolving solid oral dose or matrix form (see



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particularly page 1, line 31 through page 4, line 22 of the instant specification; column 2, lines 30-31, column 3, 57-58 and column 4, line 7 of US'104).

Alternatively, assuming arguendo that Eickhoff's formulation differs from the instant invention (i) mainly in the feature of "rapidly disintegrates upon contact with saliva in less than three minutes" recited in claims 27 and 87, more specifically "the solid dose matrix disintegrates or dissolves upon contact with saliva in a time period selected from the group consisting of less than about 2 minutes, less than about 90 seconds..." recited in claim 28 and (ii) in the lyophilization (freeze drying) of said composition in claim 49.

However, such determination of appropriate dosage form having rapidly disintegrating dosage form upon contact with saliva in less than about 3 minutes, namely "less than about 2 minutes, less than about 90 second"..." for treatment involving each of the above mentioned formulations would have been routinely made by those of ordinary skill in the art and is within the ability of tasks routinely performed by them without undue experimentation, especially in light of the known dosage formulation art.

As evidenced by the applicant's admitted prior art or US'104, there are general references indicating that pharmaceuticals generally may be delivered rapidly dissolving formulations, as well as disclosing benefits to be achieved by "rapidly dissolving formulation" or "fast melt" dosage forms versus other modes of administration. Therefore, there exist general art accepted motivations for formulating drugs for "rapidly dissolving formulation" or "fast melt" dosage forms.

With respect to the preparation of said composition via lyophilization, applicant's admitted prior art of record (particularly page 3, lines 13-22) teaches the routine knowledge in preparing fast disintegrating oral dosage form or fast melt dosage formulation via free-drying techniques. Above references in combination make clear that the preparing said rapidly disintegrating or dissolving dosage formulation or fast melt dosage forms made by various techniques including fluid bed granulation or lyophilization is well known and within the skill of artisan. Thus, one would have been motivated to combine these references and make the modification because they are drawn to same technical fields (constituted with same ingredients and share common utilities), and pertinent to the problem which applicant concerns about. MPEP 2141.01(a).

10. Claims 27-50 and 87-106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eickhoff et al. (USP 5518738) in view of applicant's admitted prior art of record (pages 1, line 31 through page 4, line 22) or Allen et al. (US 6177104), and further in view of Kerkhof et al. (WO 01/45674 A1). See above 35 USC 103 (a) rejection.

Similar to Eickhoff, Kerkhof disclose nanoparticle compositions comprising a nonsoluble drug including antibiotics, analgesics, anti-inflammatory agents, anthelmintics, anti-arrhythmic agents, anticoagulants, antidepressants, antidiabetic agents, antiepileptics, etc... in water-dispersible excipient (i.e. mannitol, lactose, carbonates, bicarbonates, etc...), and/or surface stabilizer such as surfactant (i.e., polyvinylpyrrolidone, sodium dodecylsulfate (commonly known as sodium lauryl sulfate), carboxymethylcellulose, etc...), wherein said composition is made by fluid bed granulation and spray-drying method where a suitable excipient, such as spray-dried lactose, is fluidized by an upward gas stream; and wherein one part by weight of an

active ingredient is combined with about 2.5 to about 50 parts, preferably about 2.5 to about 20 parts of an excipient (abstract; page 10, lines 1-12; page 10, line 25 through page 11, line 9; page 11, lines 10-27; page 15, lines 1-18; page 8, lines 11-16 and 25-27; page 15, lines 1-17; page 12, line 29 thru page 13, line 6; Claims, particularly claims 1-2, 7, and 19). According to Kerkhof, the nanoparticle can have a mean particle size between 50-1000 nm (Claim 2 and page 7, lines 20-23). The composition can be fashioned into tablets, capsules or syrups (page 14, lines, 12-15). According to Kerkhof, the method of preparing a nanoparticle composition can comprise spraying a solution of a poorly soluble drug and a solvent into a bed of carrier particles (claim 1). The solution may further comprise a surface modifier, such as a surfactant (claims 1, 18, 19). The nanoparticle composition can have a mean particle size of around between 50-1000nm (claim 2 and page 7, lines 20-23). Kerkhof also disclose a method of administering a nanoparticle composition comprising a surface modifier, such as a surfactant, and a drug to a human (page 14, lines 16-27). Prior to administration, the composition may be formulated into a tablet (page 14, lines 12-15).

The modified teaching of Eickhoff (combination of Eickhoff et al. and the applicant's admitted prior art of record or Allen et al.) includes all that is recited in the claimed invention except the specific particle size or the active agent, namely "less than about 100 nm", more particularly "less than about 50 nm" recited in claims 35, 36, 94 and 95 respectively, "further comprising at least one effervescent agent" recited in claim 48 and "the poorly soluble active agent is in the form of crystalline particles, semi-crystalline particles or amorphous particles" recited in claims 50 and 106. To incorporate such teaching into the modified teaching of Eickhoff, would have been obvious in view of Kerkhof who teaches the routine knowledge in

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preparing nanoparticle of a nonsoluble active (i.e., antibiotics, analgesics, anti-inflammatory agents, anthelmintics, anti-arrhythmic agents, anticoagulants, antidepressants, antidiabetic agents, antiepileptics, etc...) to a mean particle size between 50-1000nm in carrier excipients and/or surface stabilizer and the use of effervescent such as bicarbonate in said composition.

Above references in combination make clear that the determination of the specific (nano) particle size of the poorly soluble active agent required in the instant invention and the use of bicarbonate in said composition as a secondary ingredient in areas of pharmaceutical dosage art are well known. Thus, one having ordinary skill in the art would have been motivated to combine the references and make such modification to extend the usage of said composition in rapidly disintegrating nanoparticulate form to accommodate patient's preference and needs where the compliance could be improved with effective and well tolerated drug.

One would have been motivated to combine these references and make the modification because they are drawn to same technical fields (constituted with same ingredients and share common utilities), and pertinent to the problem which applicant concerns about. MPEP 2141.01(a).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 27-50 and 87-106 are rejected under the judicially created doctrine of double patenting over claims 1-24 and 51-70 of USP 6316029.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant application and the patent are directed to a oral solid dose rapidly disintegrating nanoparticulate formulation comprising water-soluble or water-dispersible excipient and a poorly soluble active agent less than about 200 nm prior to inclusion in the dosage forms and at least one surface stabilizer.

12. Claims 27-50 and 87-106 are rejected under the judicially created doctrine of double patenting over claims 1-16 and 21 of USP 6165506, further in view of the applicant's admitted prior art of record (page 3, lines 13-22)..

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant application and the patent are directed to a oral solid dose nanoparticulate formulation comprising water-soluble or water-dispersible excipient and a poorly soluble active agent less than about 200 nm prior to inclusion in the dosage forms and at least one surface stabilizer.

Although USP'506 is silent about the characteristic of said composition having "rapidly disintegrating", such property or characteristic deems to be inherent to the referenced

composition since the essential components of USP'506 are identical to the instant composition. Thus, USP'506 makes obvious the instant invention.

13. Claims 27-50 and 87-106 are rejected under the judicially created doctrine of double patenting over claims 1-177 of US 7276249, and further in view of applicant's admitted prior art of record (pages 1, line 31 through page 4, line 22) or Kerkhof et al. (WO 01/45674 A1). .

Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the instant invention overlaps with the patented claims.

Although independent claims of 1, 64, 121, 178 and 184 of US'249 do not specially recite the instant "at least one pharmaceutically acceptable water soluble or water-dispersible excipient", it is clear from reading the referenced claims 42-50, 56, 99-103, 105-113, 118, 156-160, 162-170 and 175 that said composition is prepared in the water soluble or dispersible excipients. Thus, US'249 makes obvious the instant invention.

With respect to the instantly required rapidly disintegrating or dissolving property of said composition in claims 27 and 87, such determination of suitable dosage delivery form is considered obvious task for the skilled artisan especially in view of the referenced claim 34, .97 and 154. Thus, USP'249 makes obvious the instant invention.

With respect to the instantly required specific nanoparticle sizes of the active drug and the specific amounts of active and inactive ingredients in claims 32-42 and 91-101, such optimization of known active and/or inactive ingredients is considered obvious task for the skilled artisan especially in view of the referenced claims 11-24, 26-29, 74-92, 114-115 and 131-149. Thus, USP'249 makes obvious the instant invention.

With respect to the preparation of said composition via “spray-dried mannitol and spray-dried lactose”, “fluid bed granulation” or “lyophilized” or the preparation of said composition with “a direct compression material and a non-direct compression material”, namely mannitol or lactose and effervescent agent, such determination of suitable technique to make “fast melt” or “rapidly disintegrating or dissolving” drug or using known secondary ingredients in is considered obvious task for the skilled artisan especially in view of the referenced claims 34-35, 97-98 and 154-155 and applicant’s admitted prior art of record (pages 1, line 31 through page 4, line 22) or Kerkhof et al. (WO 01/45674 A1). Thus, USP’249 makes obvious the instant invention.

In looking in continuity data, it is noted that applicant has numerous issued patent and pending applications encompassing the same or similar subject matter of the instant application. Applicant should review all subject matter considered the same or similar, and submit the appropriate Terminal Disclaimer(s). For example, 09/337675, 11/275069, 10/392303, 12/068706, etc... are drawn to same or similar subject matter(s).

#### ***Response to Arguments***

14. Applicant's arguments filed 08/11/2008 have been fully considered but they are not persuasive.

Applicant’s argument in the response takes the position that an element may be explicitly excluded in the claims if the element is positively recited in the specification. Applicant alleges that the present claims excluding a non-steroidal anti-inflammatory drug (NSAID) are supported by the specification, because the NSAID is explicitly disclosed in Example 1.

This argument is not found persuasive. In this case, the negative limitation introduced by the applicant was not appeared at the time of the invention was made. Rather, the applicant becomes aware of prior art (e.g., USP 5518738) which is distinguishable via negative claim limitations, during the course of prosecution, after the patent application has been filed, and without any express statement of the negative limitation in the as-filed specification. It appears that the negative limitation is seemingly an overt attempt to avoid prior art when no patentable reason for the exclusion exists. Applicant's attention is directed *In re Langdon* 77 F.2d 920, 25 USPQ 415 (CCPA 1935).

Applicant's argument in the response takes the position that the examiner's analysis fails to acknowledge that the components of the claimed invention are modified by the functional limitation requiring rapid disintegration upon contact with saliva. Applicant alleges that the matrix of at least one water-soluble or water-dispersible excipient within which the nanoparticulate composition is dispersed enables this rapid dissolution, and that a composition comprising the same components but having a different structure, such as the composition of Eickhoff, does not have the rapid dissolution required by Applicant's claimed invention. Furthermore, applicant alleges that Eickhoff requires dosage form having a "coating" or film comprising polyvinylpyrrolidone, a hydroscopic sugar, and a sodium lauryl sulfate; and that a "film structure is not the same as the claimed "matrix" structure.

This argument is not found persuasive. The term "matrix" is generally recognized as "something within or from which something else originates, develops, or takes form" (Merriam-Webster Online Dictionary). In other words, the instant solid dose matrix containing the



nanoparticulate active agent and at least surface stabilizer is construed to mean any solid dose form containing same components. Since the analysis of the instant claims requires nothing more than said components in a mere structure of matrix which will show some degree of disintegration or dissolution of said matrix or dose form in less than about 3 minutes when it is contact with saliva, the examiner determines that the prior art oral solid dose form containing same components or elements which is disclosed as "more rapid onset of action following oral administration" must inherently possess such characteristic when it is contacted with saliva and thus anticipates the claimed invention.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the applicant's admitted prior art of the record makes clear that the preparation of poorly soluble drugs having nanoparticulate form via lyophilization technique was well known at the time of the invention was made (see also USP 5384124). Thus, one having ordinary skill in the art would have been motivated to extend the usage of said composition. One would have been motivated to make such modification to increase solubility and/or improve disintegration rate to accommodate patient's preference and needs where the compliance could be improved with effective and well tolerated dosage regimen.

Although the instant claims use the different names for the said ingredients than those taught in the cited references, these references are particularly pertinent and relevant because all the claimed species and their roles are well taught in the cited reference. Thus, one would have been motivated to combine these references and make the modification because they are drawn to same technical fields (constituted with same ingredients and share common utilities), and pertinent to the problem which applicant concerns about. MPEP 2141.01(a).

### Conclusion

15. No Claim is allowed.
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Kwon whose telephone number is (571) 272-0581. The examiner can normally be reached Tuesday through Friday from 9:00 am to 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached on (571) 272-0718. The fax number for this Group is (571) 273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications may be obtained from Private PAIR only. For more information about PAIR system,

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see <http://pair-direct.uspto.gov> Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Brian-Yong S Kwon/  
Primary Examiner, Art Unit 1614